The Commonwealth of Massachusetts Executive Office of Health and Human Services Department of Public Health William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

08/08/2011

Assistant District Attorney, Suffolk County

Dear ADA Lord,

Enclosed is the information you requested in regards to item #

Commonwealth vs.

1. Curriculum Vitae for Hevis Lleshi and Annie Dookhan.

2. Drug Analysis Laboratory Receipt.

3. Control Card with analytical results for sample #

4. Analysis sheet with custodial chemist's hand notations and test results.

5. GC analytical data for sample #

6.GC/Mass Spectral analytical data for sample #

Hevis Lleshi was the custodial chemist and performed preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Hevis Lleshi Chemist I Drug Analysis Laboratory Jamaica Plain, MA 02130 (617) 983-6627

Curriculum Vitae

Hevis Lleshi

Education

Boston University School of Medicine – Master of Science, Forensic Science University of South Florida – Bachelor of Arts, Clinical Psychology

Related Coursework

Forensic Chemistry • Forensic Toxicology • Forensic Pathology • Forensic DNA Analysis Organic / Analytical Chemistry • Forensic Biology • Biochemistry • Forensic Trace Evidence

Employment

March, 2011 – Present Chemist I, Massachusetts Department of Public Health, Drug Analysis Laboratory

- Appointed Assistant Analyst by Assistant Commissioner of Public Health, June, 2011
- •Responsible for the identification of substances to determine violation of harmful and narcotic drug laws of the Commonwealth of Massachusetts
- Trained in the use of complex analytical instrumentation for the purpose of forensic drug analysis

Additional Training and Laboratory Experience

- Completed ten-week training course conducted by Laboratory Senior Staff within the Department of Public Health, Drug Analysis Laboratory
- Instrumental Forensic Chemistry/Toxicology Laboratory, Boston University, 2009
- Serology/Bloodstain Pattern Analysis Techniques, Boston University, 2009

Internship, Massachusetts State Police—Marine Section, Boston, MA, 2008 – 2010

Associations

- American Academy of Forensic Sciences (AAFS)
- Boston University Forensic Science Society (BUFSS)

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- *Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice - Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)



DRUG RECEIPT

| BOSIONE DE PARTMENT DRUG RECEIPT | CC # |
|---|----------------|
| Name & Rank of Arresting Officer Sho Wm | DWAW 10# 10060 |

| DEFENDANT'S NAME | ADI | PRESS | CITY | STATE |
|--------------------------------|-----|-------------------|-----------------|--------------------|
| | | | RoxBury | MA |
| | | | | |
| | | | LAB US | SE ONLY |
| DESCRIPTION OF ITEMS SUBMITTED | | GROSS QUANTITY | GROSS WEIGHT | ANALYSIS NUMBER |
| CRACK COCHNE | | 1 LRG- ROCK | 7,19 | |
| | | | | |
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To be completed by ECU personnel only

| Name and Rank of Submitting Office | Ty61 | 1 | ashik |
|--|------|----|-------|
| Traine and trained of Dassining Office | | 12 | |

Received by __

Date _

ECU Control #

® া<u>প্রিট্</u>রি≑31

DATE ANALYZED: 07-06-11 CITY: BOSTON D.C.U. POLICE OFFICER: P.O. SYBIL WHITE

DEF:

AMOUNT:

SUBST: SUB

No. CONT:

1 CONT: PB

DATE REC'D: 05/04/2011 No. ANALYZED:

GROSS WT:

7.190 NET WT: 2.979 #TESTS: 7

* 20s0

PRELIM: Coccine (HLL) FINDINGS: COCCUTE

DRUG POWDER ANALYSIS FORM

| SAMPLE # | AGENCY BOST | analyst | HLL |
|---|--|--|-----------------------|
| No. of samples tested: | | Evidençe Wt. | <u>OK</u> |
| PHYSICAL DESCRIPTION: | Off white chur substance 1005e evidence bog. | | 2.97800 |
| PRELIMINARY TESTS Spot Tests | | Microcrystalline Te | <u>sits</u> |
| Cobalt Thiocyanate (<u>) + weak</u> | /tstrong blue w/ock | Gold Chloride + | |
| Marquis | | TLTA (-) + (c | weak + w/ould) |
| Froehde's | | OTHER TESTS | |
| Mecke's | 1 | GC:+ K me similar to Go Sec run on 6 | <u>calne 0</u> 3.6 94 |
| PRELIMINARY TEST RESU | <u>ILTS</u> | GCIMS CONFIRMATOR | Y TEST |
| RESULTS GCALAG | | RESULTS Goald | 76 |
| DATE 6/29/3 | <u>0</u> | MS PERATOR ASI | > |
| | | DATE 7/6 | 12011 |

Data File C:\CHEM32\1\DATA\SIG1000002.D

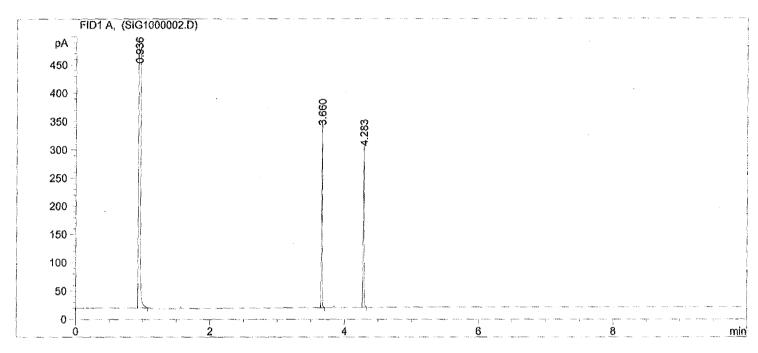
Sample Name: Cocaine/Codeine STD

Acq. Operator : ASD Seq. Line : 2
Acq. Instrument : DrugLab GC #2 Location : Vial 2
Injection Date : 6/29/2011 2:52:52 PM Inj : 1

Inj Volume : 1 μ l

Sequence File : C:\CHEM32\1\SEQUENCE\DEFAULT.S
Method : C:\CHEM32\1\METHODS\ROUTINE.M

Last changed : 7/28/2010 1:59:36 PM



Area Percent Report

Sorted By : Retention Time Multiplier: : 1.0000 Dilution: : 1.0000

Sample Amount: : 1.00000 [ng/ul] (not used in calc.)

Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

| Peak | RetTime | Sig | Туре | Area | Height | Area |
|------|---------|-----|------|-----------|-----------|----------|
| | | | | | [pA] | |
| | | | | | | |
| 1 | 0.936 | 1 | BB S | 5.51122e4 | 6.19411e4 | 99.06488 |
| 2 | 3.660 | 1 | BB | 266.51126 | 317.34833 | 0.47906 |
| 3 | 4.283 | 1 | BB | 253.72009 | 280.55545 | 0.45606 |

Totals: 5.56325e4 6.25390e4

*** End of Report ***

Data File C:\CHEM32\1\DATA\SIG1000005.D

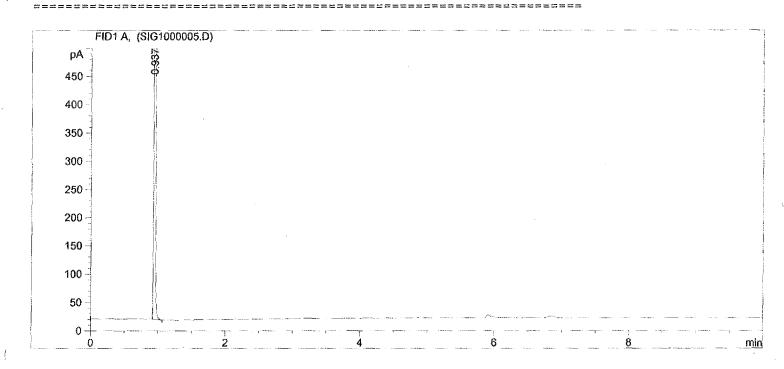
Sample Name: Blank

Acq. Operator : ASD Seq. Line : 5
Acq. Instrument : DrugLab GC #2 Location : Vial 5
Injection Date : 6/29/2011 3:33:20 PM Inj : 1

Inj Volume : 1 μ L

Sequence File : C:\CHEM32\1\SEQUENCE\DEFAULT.S
Method : C:\CHEM32\1\METHODS\ROUTINE.M

Last changed : 7/28/2010 1:59:36 PM



Area Percent Report

Sorted By : Retention Time Multiplier: : 1.0000 Dilution: : 1.0000

Sample Amount: : 1.00000 [ng/ul] (not used in calc.)

Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

| Peak | RetTime | Sig Type | Area | Height | Area |
|------|---------|----------|-----------|-----------|---------|
| | | | | [pA] | |
| | | | | | |
| 1 | 0 937 | 1 RR C | 5 7205864 | 6 3507464 | 1 000e2 |

Totals: 5.72058e4 6.35074e4

*** End of Report ***

Sample Name:

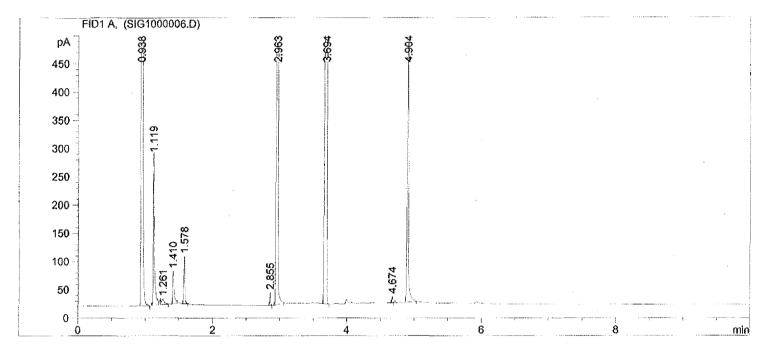
Acq. Operator : ASD Seq. Line : 6
Acq. Instrument : DrugLab GC #2 Location : Vial 6

Injection Date : 6/29/2011 3:46:59 PM Inj :

Inj Volume : 1 μ l

Sequence File : C:\CHEM32\1\SEQUENCE\DEFAULT.S
Method : C:\CHEM32\1\METHODS\ROUTINE.M

Last changed : 7/28/2010 1:59:36 PM



Area Percent Report

Sorted By : Retention Time Multiplier: : 1.0000 Dilution: : 1.0000

Sample Amount: : 1.00000 [ng/ul] (not used in calc.)

Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

| Peak | RetTime | Sig | Туре | Area | Height | Area |
|------|---------|-----|------|------------|------------|----------|
| # | [min] | | | [pA*s] | [pA] | ક |
| | | | | | | |
| 1 | 0.938 | 1 | BB S | 4.51554e4 | 4.98877e4 | 85.14770 |
| 2 | 1.119 | 1 | BV | 324.74472 | 265.43051 | 0.61236 |
| 3 | 1.261 | 1 | VB | 28.95380 | 10.31206 | 0.05460 |
| 4 | 1.410 | 1 | BB | 83.49037 | 57.98993 | 0.15743 |
| 5 | 1.578 | 1 | BB | 97.51931 | 84.28214 | 0.18389 |
| 6 | 2.855 | 1 | BB | 18.59253 | 22.87146 | 0.03506 |
| 7 | 2.963 | 1 | BB | 1751.95483 | 1124.53784 | 3.30359 |
| 8 | 3.694 | 1 | BB | 4940.81201 | 3356.68677 | 9.31668 |
| 9 | 4.674 | 1 | BV | 10.47431 | 11.52129 | 0.01975 |
| 10 | 4.904 | 1 | BB | 619.91693 | 437.54306 | 1.16895 |

Totals: 5.30319e4 5.52589e4

File Name : C:\msdchem\1\System7\07_01_11\794604.D

Operator : ASD

Date Acquired : 1 Jul 2011 11:09

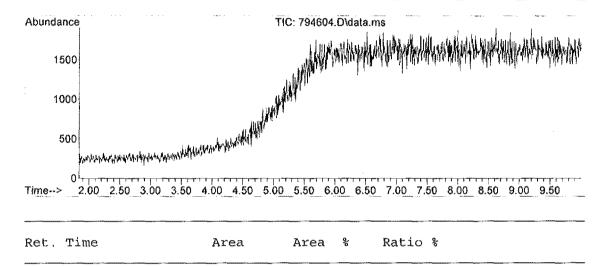
Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M

Integrator : RTE

1895 N



File Name : C:\msdchem\1\System7\07_01_11\794605.D

Operator : ASD
Date Acquired : 1 Jul 2011 11:22
Sample Name : COCAINE STD

Submitted by :

Vial Number 5 AcquisitionMeth: DRUGS.M Integrator : RTE

| Abundance | 4.659 | TIC: 794605.D\data.ms |
|-----------|----------------------------------|--|
| 1000000 | 4.030 | |
| 500000 | | |
| 7ime> 2 | 2.00 2.50 3.00 3.50 4.00 4.50 5. | .00 5.50 6.00 6.50 7.00 7.50 8.00 8.50 9.00 9.50 |

| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.659 | 1180928 | 100.00 | 100.00 |

File Name : C:\msdchem\1\System7\07 01 11\794605.D

Operator : ASD

1 Jul 2011 11:22

Date Acquired Sample Name

COCAINE STD

Submitted by

Library/ID

Vial Number

PK#

AcquisitionMeth: DRUGS.M

Integrator

RT

: RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

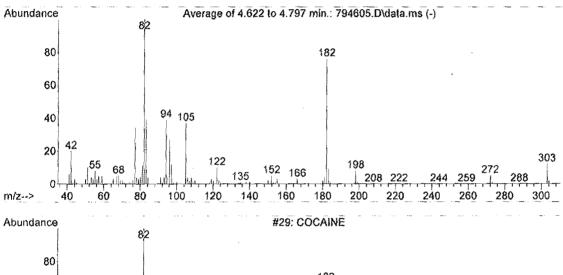
CAS#

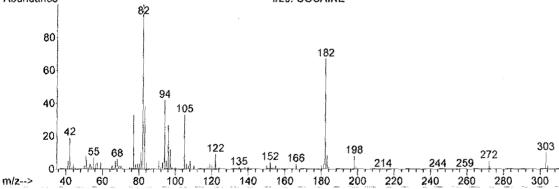
Qual

C:\Database\SLI.L 4.66 COCAINE

000050-36-2

99





File Name : C:\msdchem\1\System7\07 01 11\794606.D

Operator : ASD

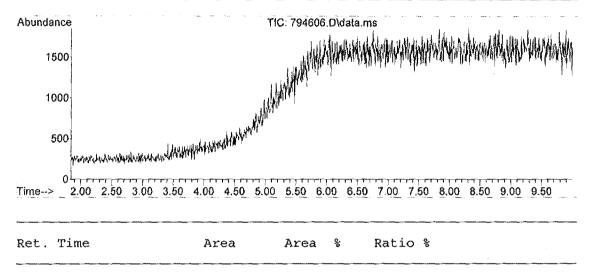
Date Acquired : 1 Jul 2011 11:34

Sample Name : BLANK

Submitted by

Vial Number :

AcquisitionMeth: DRUGS.M Integrator : RTE



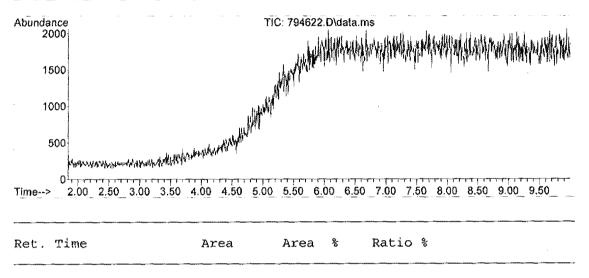
File Name : C:\msdchem\1\System7\07_01_11\794622.D

: ASD Operator

Date Acquired : 1 Jul 2011 14:58

Sample Name : BLANK Submitted by Vial Number

: HLL AcquisitionMeth: DRUGS.M Integrator : RTE



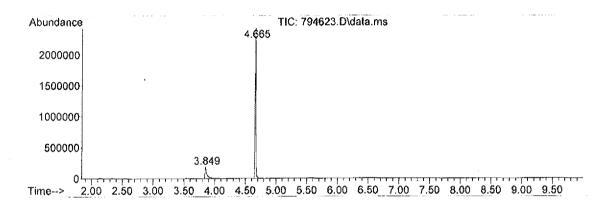
File Name : C:\msdchem\1\System7\07_01_11\794623.D

Operator : ASD

Date Acquired : 1 Jul 2011 15:11

Sample Name :
Submitted by : HLL
Vial Number : 23
AcquisitionMeth: DRUGS.M

Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 3.849 | 464320 | 15.48 | |
| 4.665 | 2534917 | 84.52 | |

File Name : C:\msdchem\1\System7\07_01_11\794623.D

Operator : ASD

Date Acquired : 1 Jul 2011 15:11

Sample Name :

Submitted by : HLL
Vial Number : 23
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minim

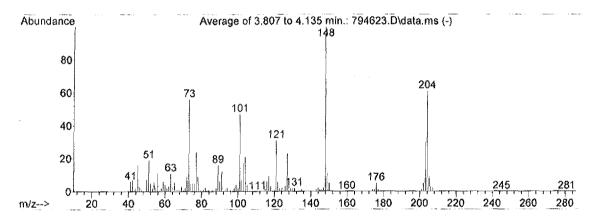
Minimum Quality: 80 Minimum Quality: 80

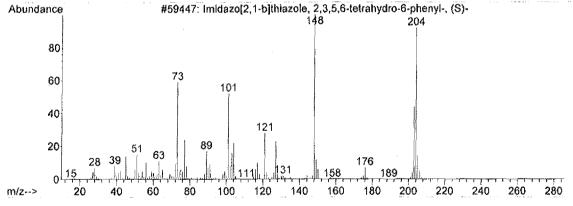
C:\Database\NIST05a.L
C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 3.85 C:\Database\NIST05a.L

Imidazo[2,1-b]thiazole, 2,3,5,6-tet 014769-73-4 99
Imidazo[2,1-b]thiazole, 2,3,5,6-tet 006649-23-6 98
Imidazo[2,1-b]thiazole, 2,3,5,6-tet 014769-73-4 97





File Name : C:\msdchem\1\System7\07_01_11\794623.D

Operator : ASD

Date Acquired : _1 Jul 2011 15:11

Sample Name :

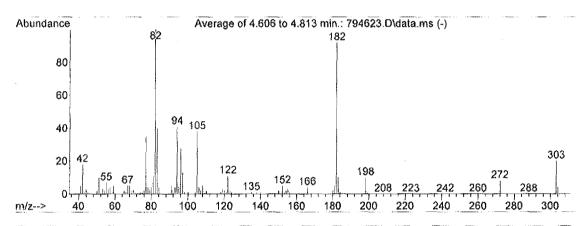
Submitted by : HLL Vial Number : 23 AcquisitionMeth: DRUGS.M Integrator : RTE

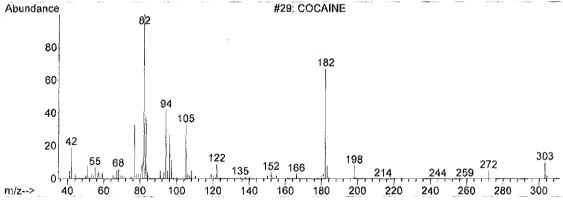
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | Cas# | Qual |
|-----|------|------------------------------|-------------|------|
| 2 | 4.66 | C:\Database\SLI.L COCAINE | 000050-36-2 | 99 |



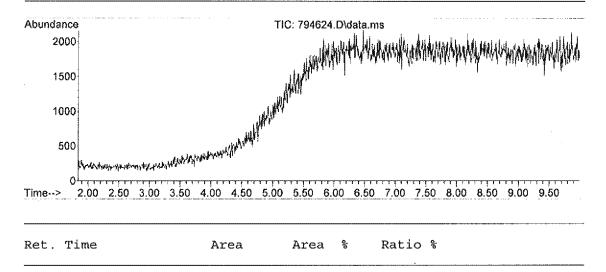


File Name : C:\msdchem\1\System7\07_01_11\794624.D

Operator : ASD

Date Acquired : 1 Jul 2011 15:23

Sample Name : BLANK
Submitted by : HLL
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



File Name : C:\msdchem\1\System7\07_01_11\794627.D

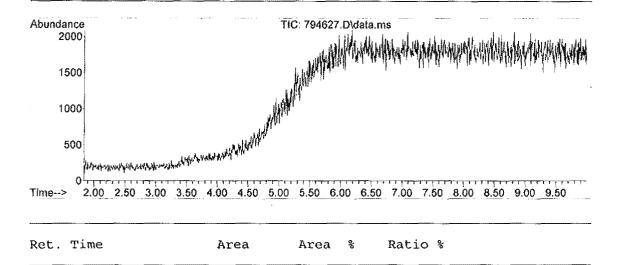
Operator : ASD

Date Acquired : 1 Jul 2011 16:01

Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE



File Name : C:\msdchem\1\System7\07_01_11\794628.D

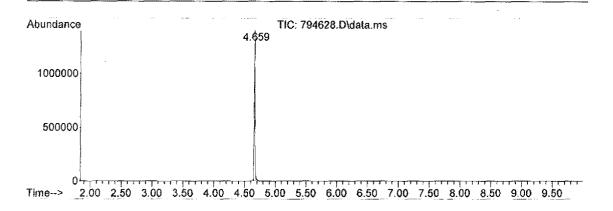
Operator : ASD

Date Acquired : 1 Jul 2011 16:14

Sample Name : COCAINE STD

Submitted by

Vial Number : 5 AcquisitionMeth: DRUGS.M Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.659 | 1238857 | 100.00 | 100.00 |

Area Percent / Library Search Report

Information from Data File:

File Name : C:\msdchem\1\System7\07_01_11\794628.D

Operator : ASD

Date Acquired 1 Jul 2011 16:14

Sample Name

Submitted by

Search Libraries:

COCAINE STD

Vial Number 5

AcquisitionMeth: DRUGS.M Integrator : RTE

C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

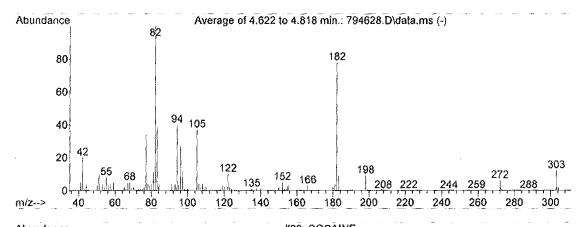
PK# RT Library/ID CAS# Qua1

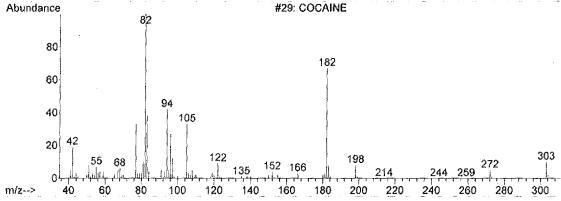
1 4.66 C:\Database\SLI.L

COCAINE

000050-36-2

99





File Name : C:\msdchem\1\System7\07_01_11\794629.D

Operator : ASD

Date Acquired : 1 Jul 2011 16:27

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE

